

# **AUTOMATED BRAIN MRI AND CT PRESCRIPTIONS IN TALAIRACH SPACE**

## **Abstract of the Invention**

Brain Magnetic Resonance Imaging (MRI), Computerized Tomotography (CT), or other diagnostic modalities may employ a three-step procedure during initial ("scout") cranial pre-scans that corrects for patient positioning (i.e., roll, yaw and pitch) to reduce inter- and intra-patient variation, thereby enhancing the diagnostic and comparative value of subsequent detail scans even across different diagnostic platforms. In MRI, for instance, locating the sagittal sinus (SS) and optimizing a line to bisect the brain through this SS may be automated to correct for roll and yaw. By then identifying the contour of the corpus callosum in a lateral sagittal scout scan, the Talairach anterior commissure (AC) - posterior commissure (PC) reference line may be found for correcting pitch. Prescription of detailed scans are improved, especially when the three-step correction is repeated periodically identifying the need to repeat a detailed scan or to adjust the coordinates of a subsequent scan.